

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1 – 19 (Canceled)

20. A process for the preparation of alkylhalosilanes which comprises reacting an alkyl halide with a solid body formed of silicon in the presence of a catalytic system comprising (α) a copper catalyst and (β) a group of promoting additives, wherein said group comprises:

an additive β 1 chosen from metallic zinc, a zinc-based compound or a mixture thereof,

an additive β 2 chosen from tin, a tin-based compound or a mixture thereof,

optionally, an additive β 3 chosen from cesium, potassium, rubidium, a compound derived from these metals or a mixture thereof, wherein

the copper catalyst (α) is in the form of metallic copper, a copper halide or a mixture thereof, and

the solid body includes a supplementary promoting additive β 4 chosen from a derivative of an acid of phosphorus or a mixture thereof.

21. The process as claimed in claim 20, wherein the catalyst (α) is used at a content by weight ranging from 1 to 20%, with respect to the weight of silicon introduced.

22. The process as claimed in claim 20, wherein the additive $\beta 4$ is an alkali metal salt, an alkaline earth metal salt or a metal salt of an acid selected from the group consisting of a hypophosphorous acid, a phosphorous acid, (ortho, pyro, meta); a hypophosphoric acid, a phosphoric acid (ortho, pyro, meta), polyphosphoric acid of the formula $M_{n+2}(P_nO_{3n+1})$ where M represents an alkali metal and n is a number ranging from 1 to 10, and a mixture of these salts.

23. The process as claimed in claim 20, wherein the content of additive $\beta 4$ lies within the range extending from 50 to 3000 ppm.

24. The process as claimed in claim 20, wherein, the additive $\beta 4$ is added to the solid body in the state in which it naturally occurs.

25. The process as claimed in claim 24, wherein the additive $\beta 4$ is selected from the group consisting of sodium hypophosphite (NaH_2PO_2), potassium hypophosphite (KH_2PO_2), calcium hypophosphite ($Ca(H_2PO_2)_2$), magnesium hypophosphite ($Mg(H_2PO_2)_2$), copper(II) hypophosphite ($Cu(H_2PO_2)_2$), aluminum hypophosphite ($Al(H_2PO_2)_3$), and mixtures thereof.

26. The process as claimed in claim 24, wherein the additive $\beta 4$ comprises calcium hypophosphite $Ca(H_2PO_2)_2$.

27. The process as claimed in claim 23, wherein additive β_4 is added to the solid body in the form of an adduct comprising a copper halide constituting the catalyst (α) and at least one derivative of an acid of phosphorus.

28. The process as claimed in claim 27, wherein the additive β_4 is selected from the group consisting of trisodium phosphate (NaH_2PO_2), tripotassium phosphate (K_3PO_4), monocalcium phosphate ($\text{Ca}(\text{H}_2\text{PO}_4)_2$), dicalcium phosphate (CaHPO_4), tricalcium phosphate ($\text{Ca}_3(\text{PO}_4)_2$), basic calcium orthophosphate ($\text{Ca}_5(\text{PO}_4)_3\text{OH}$), copper(II) phosphate ($\text{Cu}(\text{H}_2\text{PO}_4)_2$), sodium polyphosphate ($\text{Na}_5\text{P}_3\text{O}_{10}$), and mixtures thereof.

29. The process as claimed in claim 27, wherein the additive β_4 comprises tricalcium phosphate ($\text{Ca}_3(\text{PO}_4)_2$), basic orthophosphate ($\text{Ca}_5(\text{PO}_4)_3\text{OH}$) or mixtures thereof.

30. The process as claimed in claim 27, wherein the amount of catalyst (α) is chosen so as to contribute to the solid body, a content of derivative(s) of an acid of phosphorus, calculated as ppm of elemental phosphorus with respect to the weight of silicon introduced, which lies within the range extending from 50 to 3000 ppm.

31. The process as claimed in claim 20, wherein the content of additive β_1 lies within the range extending from 0.01 to 2.0%.

32. The process as claimed in claim 20, wherein the additive β_1 is metallic zinc or zinc chloride, or mixtures thereof.

33. The process as claimed in claim 20, wherein the content of additive $\beta 2$ lies within the range extending from 10 to 500 ppm.

34. The process as claimed in claim 20, wherein the additive $\beta 2$ is tin metal.

35. The process as claimed in claim 34, wherein the metallic tin is introduced in the form of bronze.

36. The process as claimed in claim 20, wherein the content of additive $\beta 3$, if used, lies within the range extending from 0.01 to 20%.

37. The process as claimed in claim 36, wherein the additive $\beta 3$ is cesium chloride, potassium chloride, rubidium chloride or a mixture of these compounds.

38. The process as claimed in claim 20, wherein the synthesis reaction is carried out at a temperature lying within the range extending from 260°C to 400°C, under a pressure equal to or greater than atmospheric pressure.

39. The process as claimed in claim 20, wherein the alkyl halide is CH_3Cl .